

Claim Amendments

1. (currently amended) A ~~system receiver~~ for smoothing jitter experienced by data packets in transmission from a transmitter to ~~a~~ said receiver, comprising: a counter for determining delays experienced by data packets in transmission from said transmitter to said receiver, a delay estimator adapted to estimate data indicative of an adaptive packet delay histogram, having a mean, wherein said data indicative of the packet delay histogram is a function of the delays experienced by said data packets in transmission from ~~a~~ said transmitter to ~~a~~ said receiver and the number of data packets received at the receiver; a playout delay evaluator in data communication with the delay estimator and adapted to receive data from said delay estimator, wherein the playout delay evaluator calculates ~~calculate~~ a playout time, and wherein the calculation of said playout time utilizes said mean and a first variance derived from a portion of said data indicative of the packet delay histogram; and a playout buffer monitor adapted to receive said playout time from said playout delay evaluator, buffer the data packets for ~~the~~ a delay amount determined by the playout delay evaluator and then output the delayed data packets.
2. (currently amended) The system of claim 1, wherein the delay is calculated by subtracting the first variance from ~~a~~ the mean delay experienced by data packets in transmission from a transmitter to a receiver.
3. (currently amended) The system of claim 2, wherein the first variance is calculated based

upon a portion of the data indicative of the packet delay histogram that is less than the mean delay.

4. (currently amended) The system of claim 1, wherein the first variance is calculated using a second variance calculated from a portion of the data indicative of the packet delay histogram that differs from the portion of the data indicative of the packet delay histogram used to derive the first variance.
5. (original) The system of claim 1, further comprising a delay smoother to control changes in playout time.
6. (original) The system of claim 1, wherein the playout time is further controlled by expanding increases in playout time and limiting decreases in playout time.
7. (currently amended) A method, executed at a receiver, for substantially reducing jitter experienced by data packets in transmission from a transmitter to a said receiver, comprising the steps of: measuring delays experienced by data packets in transmission from said transmitter to said receiver, estimating a mean delay using data indicative of a packet delay histogram, wherein said data indicative of said packet delay histogram is a function of the delays experienced by said data packets in transmission from a said transmitter to a said receiver and the number of data packets received at the receiver; deriving a first variance from a first portion of said data indicative of said histogram;

deriving a second variance from a second portion of said data indicative of said histogram, wherein said first portion and second portion are not identical; setting a delay equal to a function of the mean delay and the first variance; setting a buffer size equal to a function of the first and second variance; and buffering data packets in accordance with said buffer size and delay.

8. (original) The method of claim 7, wherein the delay is equal to the mean delay minus the first variance.
9. (previously presented) The method of claim 7 wherein the buffer size is equal to the sum of the first and second variances.
10. (currently amended) A method, executed at a receiver, for substantially reducing jitter experienced by data packets in transmission from a transmitter to a said receiver, comprising the steps of: measuring delays experienced by data packets in transmission from said transmitter to said receiver, estimating a mean delay using data indicative of a packet delay histogram, wherein said data indicative of said packet delay histogram is a function of the delays experienced by said_data packets in transmission from a said transmitter to a said receiver and the number of data packets received at the receiver; deriving a first variance from a first portion of said data indicative of said histogram; deriving a second variance as a function of the first variance; setting a delay equal to a function of the mean delay and the first variance; setting a buffer size equal to a function

of the first and second variance; and buffering data packets in accordance with said buffer size and minimum delay.

11. (original) The method of claim 10, wherein the second variance is equal to the first variance multiplied by a constant.
12. (original) The method of claim 10, wherein the second variance is equal to a constant minus the first variance.
13. (currently amended) A ~~system~~ receiver for smoothing jitter experienced by data packets in transmission from a transmitter to ~~a~~ said receiver, comprising: a counter for determining delays experienced by data packets in transmission from said transmitter to said receiver, a delay estimator for estimating data indicative of a packet delay histogram, wherein said data indicative of the packet delay histogram is a function of the delays experienced by said data packets in transmission from said transmitter to ~~a~~ said receiver and the number of data packets received at the receiver; and a playout buffer monitor having a buffer size equal to the sum of a first variance and a second variance, wherein the first variance is calculated from a first portion of said data indicative of the packet delay histogram and the second variance is calculated from a second portion of said data indicative of the packet delay histogram, and wherein said playout buffer monitor buffers the data packets for a minimum delay amount determined by the first variance.

14. (currently amended) A ~~system~~ receiver for managing jitter experienced by data packets in transmission from a transmitter to ~~a~~ said receiver, comprising: a counter for determining delays experienced by data packets in transmission from said transmitter to said receiver, a delay estimator for estimating data indicative of a packet delay histogram and a mean delay, wherein said data indicative of the packet delay histogram is a function of the delays experienced by said data packets in transmission from ~~a~~ said transmitter to ~~a~~ said receiver and the number of data packets received at the receiver; and a playout delay evaluator in communication with the delay estimator and adapted to determine a plurality of variances based upon a plurality of portions of the data indicative of the packet delay histogram, wherein the calculation of a first variance is used to determine a delay and the calculation of a second variance is used to calculate ~~determine~~ a buffer size; and a playout buffer monitor having the calculated buffer size wherein the playout buffer monitor buffers the data packets selected by the playout delay evaluator for the delay and then outputs the delayed data packets.

15. (canceled)

16. (canceled)

17. (canceled)

18. (canceled)

19. (canceled)

20. (canceled)

21. (canceled)

22. (canceled)